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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,501	08/03/2001	Veronique A. Dartois	P-SR 4877	7325

5100 7590 07/30/2003

GENENCOR INTERNATIONAL, INC.
ATTENTION: LEGAL DEPARTMENT
925 PAGE MILL ROAD
PALO ALTO, CA 94304

EXAMINER

PATTERSON, CHARLES L JR

ART UNIT	PAPER NUMBER
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1652

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,501

Applicant(s)

DARTOIS ET AL.

Examiner

Charles L. Patterson, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/11/02, 1/6/03 and 5/29/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-44 and 49-82 is/are pending in the application.
- 4a) Of the above claim(s) 42-44 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 49, 54 and 55 is/are allowed.
- 6) ☒ Claim(s) 50, 56-66, 70-76 and 80-82 is/are rejected.
- 7) ☒ Claim(s) 51-53, 67, 68 and 77-79 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

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Applicant's election with traverse of Group IV, claims 1-40 limited to a nucleic acid molecule of SEQ ID NO:7 or encoding SEQ ID NO:8 in Paper No. 10 is acknowledged. The traversal is on the ground(s) that "it would not be an additional burden on the Examiner to examine the claims reciting a polynucleotide encoding a polypeptide of SEQ ID NO:8...and claims directed to the polypeptide per se". This is not found persuasive because a search the polypeptide would not be the same search as that for the polynucleotide. Claims directed to the polynucleotide involve cloning and claims directed to the polypeptide do not necessarily involve cloning. The polypeptide claims could read on a natural product. Applicants have replaced original claims 1-41 with new claims 49-82, which read on the invention of Group IV and therefore claims 49-82 will be examined.

The requirement is still deemed proper and is therefore made FINAL.

Claims 42-44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10.

The disclosure is objected to because of the following informalities:

The recitation of the blank lines on page 1, lines 3 and 5 are indefinite and confusing. The application numbers should be filled in. Apparently these numbers should be 60/325,774 and 60/421,141, respectively.

Appropriate correction is required.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and

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use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 69 and 70 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

These claims read on oligonucleotides that consist of 20 or 50 consecutive nucleotides from anything whatsoever since the word "comprising" is used. The molecule could be from a completely unrelated gene as long as it met these characteristics. In addition, there is no requirement that the oligonucleotides encode a protein with 2,5-DKG permease activity. Therefore one of ordinary skill in the art would not know how to make and/or use the claimed invention within the bounds of the instant claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 50 is rejected under 35 U.S.C. 102(e) as being anticipated by Hoch, et al. (A). As shown in the attached sequence search, SEQ ID NO:8 of the instant application is 58.9% identical with SEQ ID NO:14 of the reference. The examiner cannot readily ascertain exactly what activity is taught for the instant sequence but it appears to have something to do with 2,5-DKG and 2-KLG. Absent some teaching that the sequence does not have 2,5-DKG permease activity, it is maintained that it does.

Claims 50, 56-66, 71, 74-76 and 80-82 rejected under 35 U.S.C. 103(a) as being unpatentable over Hoch, et al. (A). The instant reference is characterized *supra*. It would have been obvious and well within the skill level of one of ordinary skill in the art to link a promoter to the nucleic acid, place the nucleic acid into a vector and a host cell and to use it to enhance the production of 2-KLG, absent unexpected results. The motivation would have been to produce more of the enzyme.

Claim 69 is rejected under 35 U.S.C. 102(b) as being anticipated by either of Muzny, et al. (V) or Mason, et al. (W). Each of the references teach an oligonucleotide that comprises 20 contiguous nucleotides of SEQ ID NO:7.

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Claims 49 and 54-55 are allowed. Claims 51-53, 67-68, 72-73 and 77-79 are objected to as being dependent upon a rejected base claim.

The references lined out on the PTO-1449 were not present in this application or 09/677,032 (converted to 60/421,141). 09/633,294 was apparently also converted to a provision application, however the computer shows that it was converted to 60/325,744 and that another application was also converted to this same provisional application. When the provisional application was ordered it was found that the other application was inside, not related to this application. Therefore some references may be inside this application. It is also noted that 10 references listed on the PTO-1449 received 6/11/02 were also listed on the PTO-1449 received 1/6/03, and these references have also been lined out with appropriate notation.

In addition to the reference listed on the PTO-1449s, the following references were present: (1) Horikawa, Y., et al. (2000) Nat. Genet. 26, 163-175; (2) PCT search report on PCT/US01/25521; (3) PCT search report on PCT/US01/24327; (4) PCT search report on PCT/US/01/24600; (5) PCT search report on PCT/US01/24507; (6) WO 01/98468; (7) WO 01/83782; (8) WO 00/58473.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles L. Patterson, Jr., PhD, whose telephone number is 703-308-1834. The examiner can normally be reached on Monday - Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy can be reached on 703-308-3804. The fax phone number is 703-308-4242.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



Charles L. Patterson, Jr.
Primary Examiner
Art Unit 1652

Patterson
July 29, 2003